

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the subject application. The Office Action of May 2, 2003 has been received and contents carefully reviewed.

By this Amendment, Applicants amend claims 1, 2, 3, 6, 8 and 10, and add new claims 21-31. Claim 12 - 20 have been withdrawn as the result of an earlier restriction requirement. Accordingly, claims 1-31 are currently pending in the present application. Reexamination and reconsideration of the application are respectfully requested.

In the Office Action, the Examiner rejected claims 1-5 under 35 U.S.C. § 103(a) as being unpatentable over Miyawaki (U.S. Patent No. 5,897,182) in view of Nakamura et al. (U.S. Patent No. 4,654,777); rejected claims 1 and 6-11 under 35 U.S.C. § 103(a) as being unpatentable over Lee (U.S. Patent No. 5,982,467) in view of Nakamura et al. Applicants respectfully traverse these rejections.

Claim 1 is allowable over the cited references in that claim 1 recites a combination of elements including, for example, a gate electrode including a head portion, the head portion having an inclined part sloped at a first angle relative to the first straight line direction of the data line and a second angle relative to the second straight line direction of the gate line, the inclined part being unparallel to the gate line. None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 1, and claims 2-11 and 28-30, which depend therefrom, are allowable over the cited references.

Claim 21 is allowable over the cited references in that claim 21 recites a combination of elements including, for example, a first overlapping portion between the source electrode and the gate electrode having a first width and a second overlapping portion between the drain electrode and the gate electrode having a second width, the first width being larger than the second width, the first width of the source electrode and the second width of the drain electrode corresponding to a shape of the semiconductor layer. None of the cited references, singly or in combination,

teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 21 and claims 22-27, which depend therefrom, are allowable over the cited references.

Applicants respectfully submit that one of the subject matters of the present invention is to reduce the parasitic capacitances (C_{gs} and C_{gd}) by reducing the overlapping areas between the gate electrode and the source and drain electrodes, as recited in claim 1. See paragraph [0087] of the present application. However, Fig. 16 of Miyawaka, for example, discloses that the source electrode 7 is formed using the signal line 3, wherein the signal line 3 almost completely overlaps the gate electrode 1. Applicants respectfully submit that, as best understood, such a TFT structure in Miyawaka would result in a high parasitic capacitance, for example, C_{gs} . In view of these distinguishing features, Applicants respectfully submit that Miyawaka, the primary reference in the Office Action, fails to teach or suggest the recited feature.

New claims 26-29 are further allowable over the cited references in that these claims recite, in varying degrees of specificity, a combination of elements including the semiconductor layer having a shape of a funnel having a top portion and a bottom portion, an overlapping portion between the source electrode and the gate electrode corresponding to the top portion of the funnel and an overlapping portion between the drain electrode and the gate electrode corresponding to the bottom portion of the funnel. None of the cited references teaches or suggests this feature of the present invention.

New claim 31 is allowable over the cited references in that claim 31 recites a combination of elements including the gate electrode having means for reducing the overlapping areas between the gate electrode and the source and drain electrodes, whereby a parasitic capacitance is reduced. None of the cited references teaches or suggests this feature of the present invention.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. If the Examiner deems that a telephone conference would further the prosecution of this application, the Examiner is invited to

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call the undersigned attorney at the telephone number (202) 496 - 7500. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

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Respectfully submitted,

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